In the Claims

1. (Previously Presented) A metallization stack in an integrated MEMS device, the metallization stack comprising:

a substrate having an electrically conductive structure;

a field oxide, having a contact hole therein, formed over said substrate;

a silicide layer formed in said contact hole of said field oxide;

a titanium-tungsten layer, formed directly on said silicide layer, to operatively contact said electrically conductive structure in said substrate; and

a platinum layer;

said platinum layer having a first portion formed directly on said titanium-tungsten layer;

said platinum layer having a second portion formed directly on said field oxide;

said silicide layer, said titanium-tungsten layer, and said platinum layer, together, forming an electrical connection to said electrically conductive structure.

2. (Previously Presented) The metallization stack of claim 1, wherein said electrically conductive structure is an active silicon element.

3. (Previously Presented) The metallization stack of claim 2, wherein said contact hole exposes a portion of a surface of said substrate at a bottom of said contact hole and said silicide layer is formed only on the exposed portion of the surface of said substrate.

Claim 4 (Cancelled)

5. (Previously Presented) The metallization stack of claim 1, wherein the integrated

MEMS device is an optical MEMS.

6. (Previously Presented) The metallization stack of claim 1, wherein the integrated MEMS device is a Bio-MEMS device.

7. (Previously Presented) The metallization stack of claim 6, wherein said platinum layer forms a corrosive resistant electrode.

8. (Previously Presented) The metallization stack of claim 7, wherein said electrically conductive structure is an interconnect of the Bio-MEMS device.

Claims 9-29 (Cancelled)

30. (Previously Presented) The metallization stack of claim 1, wherein said silicide layer is a platinum silicide layer.

Claim 31 (Cancelled)

32. (Previously Presented) A metallization stack in an integrated MEMS device, the metallization stack comprising:

a substrate having an electrically conductive structure;

a field oxide formed over said substrate;

a silicide layer formed on said field oxide;

a titanium-tungsten layer, formed directly on said silicide layer, to operatively contact said electrically conductive structure in said substrate; and

a platinum layer;

said platinum layer having a first portion formed directly on said titanium-tungsten layer;

said platinum layer having a second portion formed directly on said field oxide.

33. (Previously Presented) The metallization stack of claim 32, wherein said electrically conductive structure is an active silicon element.

Claim 34 (Cancelled)

35. (Previously Presented) The metallization stack of claim 32, wherein the integrated MEMS device is an optical MEMS.

36. (Previously Presented) The metallization stack of claim 32, wherein the integrated MEMS device is a Bio-MEMS device.

37. (Previously Presented) The metallization stack of claim 36, wherein said platinum layer forms a corrosive resistant electrode.

38. (Previously Presented) The metallization stack of claim 37, wherein said electrically conductive structure is an interconnect of the Bio-MEMS device.

39. (Previously Presented) The metallization stack of claim 32, wherein said silicide layer is a platinum silicide layer.

Claims 40-62 (Cancelled)